

547,847

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number
WO 2004/079691 A1

(51) International Patent Classification⁷: G09B 23/28, (74) Agents: MERRYWEATHER, Colin, Henry et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5JJ (GB).

(21) International Application Number:

PCT/GB2004/000906

(22) International Filing Date: 4 March 2004 (04.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0304908.7 4 March 2003 (04.03.2003) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

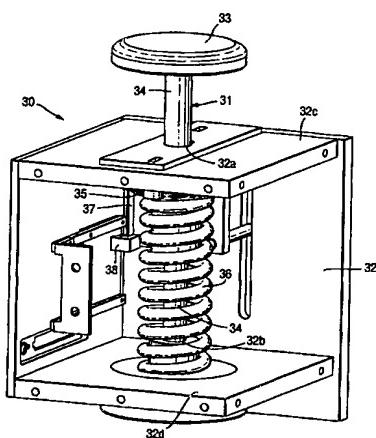
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: ANALYSIS OF PRE-CORDIAL THUMPS FOR TREATMENT OF A CARDIAC DYSRHYTHMIA



(57) Abstract: A device for analysing manual thumps, applied to simulate pre-cordial thumps for the treatment of a dysrhythmia of the heart of a patient, has an array of force-detecting, proportional sensors (1) having a frequency response of at least 1 kHz, usually 10 kHz or more. A preferred form of sensor (30) has a key (32) for receiving an applied force mounted for movement relative to a support (37) with a spring (33) having a preselected spring constant coupled therewith. An optical sensor (36) and grating (34) detect the displacement of the key (32) relative to the support (37). This sensor (30) provides advantages of being fast, accurate and truly proportional. The device has an electronic circuit for receiving the output signal of each sensor and outputting the output signals to an external computer (60) running a program to analyse and display the output signals. The device may be used to study the biophysical parameters of a pre-cordial thump or as a teaching tool to train users in the correct application of a pre-cordial thump. The device may also be used to analyse similar impacts in other technical fields.

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- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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